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AMVEC

IMPORTANT ASPECTS OF HAEMOPHILUS PARSUIS PREVENTION AND CONTROL

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Haemopilus parasuís (HPS), cominonly referred to as Glasser's disease or porcine polyserositis-arthritis, has long been considered an opportunistic stress-induced disease of conventionally reared pigs. clinical signs range fron acute outbreaks of arthritis, meningitis, muscular tremor and death to chronic forms of polyserositis-arthritis, respiratory distress and rough-haired, poor doing piglets.

Control

Management techniques have been initiated to control swine respiratory pathogens, which colonize the trachea at different stages of the pigls life. Therefore, ¡t is essential to determine which diseases are present in your herd and tailor programs to eliminate as many pathogens as possible.

All-in/all-out (AIAO) pig flow has been utilized to decrease horizontal disease spread. This technique has been successful in reducing problems associated with some diseases such as *Actínobacillus pleuropneumoníae* (APP) . Early weaning programs utilizing segregated Early Weaning (SEW), Medicated Early Weaning (MEW) and Medicated Early Weaning (MMEW) have been developed to reduce vertical disease spread by removing the piglet from the sow prior to the time at which common respiratory pathogens colonize the respiratory tract. These techniques have been successful in a variety of herds, resulting in High Health Status (HHS) herds.

Numerous HHS herds have been able to manage away from severas respiratory diseases by using a combination of techniques which were adaptable to the productions system. However, even the HHS herds have diseases caused by pathogens which colonize the respiratory tract prior to early weaning. Since HPS has been found to colonize the trachea as early as 7 days of age, ¡t is considered to be part of the normal flora of the majority of convencional herds and some HHS herds. Conventional HPS positive herds are susceptible to clinical signs of the diseases, usually after a period of stress, such as transporting or immunosuppressive desiases such as M. hyo, PRRS or PRV.

HHS herds are often naive to HPS and, therefore, fully susceptible to clinical signs associated with the disease when swine are exposed to HPS after introduction into convencional herds for finishing or as breeding stock.

Control of HPS by utilizing management techniques depends on the herd health status, management and production system of the herd. Current management trends have assisted in controlling HPS, but outbreaks continue to occur, and in severas HHS herds the disease incidence is increasing. This indicates management techniques alone are not completely successful in controlling the disease. Therefore, control through good management practices in tandem with preventative vaccination is essential.

Prevention

The use of killed bacterins, both comrnercially available and autogenous preparations, has resulted in mixed immune responsos to HPS. Until recently, little was known about the virulence, prevalence or cross-protective capabilities of the various serovars of HPS, this lack of information has made ¡t difficult to develop bacterins that would be widely efficacious. Vaccination programs had variable levels of success, depending on which serovar(s) were present in a herd and which serovar(s) were used in preparing the bacterins. Since ¡t is not uncommon to isolate more than one serovar from a given herd, the success of autogenous bacterins is limited.

Recent research by Dr. Vicki Rapp-Gabrielson èt all has produced the classification of 15 serovars of HPS. The prevalence and virulence of these 15 serovars are based on isolates from diseased tissues submitted to diagnostic laboratorios in North America. Further studies indicate cross-protective capabilities of HPS strains were limited.

Based on prevalence, virulence and cross-protective capabilities, the development of a more efficacious HPS bacterin is now possible.